EXPLANATION OF PLATE 461

Fig. 1, Eleocharis minima (type of E. oropuchensis), Trinidad, Britton, Hazen & Freeman no. 1155; 2, E. Glauca, Brazil, Spruce; 3, E. subcancellata, Mexico, Pringle no. 3430 (NY); 4, E. Brainii, Nile Land, Schweinfurth no. 2583; 5, E. subfoliata, Brazil, Spruce; 6, E. Naumanniana, French Guinea, Caille no. 14957; 7, E. caespitosissima, Madagascar, P. de la Bathie no. 17953; 8, ? E. nigrescens, Brazil, Gardner no. 2373; 9, E. amazonica, Brazil, Spruce; 10, E. Chaetaria, Ceylon, hb. Wight no. 2895; 11, E. retroflexa, Cuba, Ekman no. 236; 12, E. vivipara, Florida, Curtiss no. 3088; 13, E. Schweinfurthiana, Nile Land, Schweinfurth no. 1949; 14, E. nigrescens (E. Perrieri), Madagascar, P. de la Bathie no. 17947.

EXPLANATION OF PLATE 462

Fig. 1, Eleocharis minima var. bicolor (type of *E. savannarum*), Trinidad, *Britton*, no. 2491; 2, E. bicolor, Georgia, *Harper* no. 1711; 3, E. uncialis, Florida (achene from type); 4, E. Barrosii (type from Argentina); 5, E. nigrescens, Cuba, *León & Roca* no. 6997; 6, E. nigrescens (cotype of *E. Hildebrandtii*), Africa, *Chandler* no. 1372; 7, E. nigrescens (type from Brazil); 8, E. nigrescens var. minutiflora, Cuba, *C. Wright* no. 3766; 9, E. nigrescens var. minutiflora, Cuba, *Ekman* no. 17945; 10, E. trilophus (type from Africa); 11, E. anceps, Africa, *Mann* no. 891; 12, E. nana, Brazil, *Burchell* no. 3137; 13, E. minutissima (type from Cuba); 14, E. microcarpa (type of *E. cubensis*), *C. Wright* no. 3765.

EXPLANATION OF PLATE 463

Fig. 1, E. Geniculata from Colombia, Archer no. 75 (showing habit and immature flower); 1a, Fredholm no. 4252, Porto Rico (achene and portion of culm); 2, E. Nodulosa, Bolivia, Fiebrig no. 2328; 3, E. Densa, Mexico, Arsène no. 275.

EXPLANATION OF PLATE 464

Fig. 1, E. Tuberculosa f. Retrorsa, Massachusetts, Oakes; 2, E. Tuberculosa f. Pubnicoensis, Nova Scotia, Fernald, Long & Linder no. 20164; 3, E. Tuberculosa (typical), Florida, Curtiss no. 3096; 4, E. Tortilis, South Carolina, Ravenel; 5, E. Cylindrica, Buckley, Valley of Lower Rio Grande, Texas; 6, E. Melanocarpa, Florida, Curtiss no. 3082; 7, E. Albida, Florida, hb. Chapman.

EXPLANATION OF PLATE 465

Fig. 1, E. filiculmis, Panama, Standley no. 29168; 2, E. filiculmis (Type of E. calyptrata), Mexico; 3, E. reclinata, Maine, Gray Herb. Exs. no. 9; 4, E. pachystyla, Porto Rico, Britton, Britton & Brown no. 6674; 5, E. grisea (Cotype from Cuba). E. minima (Hitchcock no. 20087, Ecuador): Figs. 6, 7, sheath-apices; Fig. 8, base of plant showing basal spikelets; Fig. 9, achene from normal spikelet; Fig. 10, achene from basal spikelet.

THREE AQUATICS FROM SOUTHERN MAINE

NORMAN C. FASSETT

Eleocharis parvula (R. & S.) Link, f. **spongiosa**, n. f., culmis spongiosis septatis ad 1 mm. diametro.—Brackish mud near low tide level, Kennebec River, Woolwich, Maine, August 16, 1933, N. C. Fassett, no. 16036 (Type in the Herbarium of the University of Wisconsin).

This is an estuarine form with spongy culms, which so closely resembles a little sterile Sagittaria that it was mistaken for a member of that genus when found by Dr. H. K. Svenson and the writer on the tidal shores of the St. Lawrence River, and was, indeed, later treated as such by Dr. Svenson.\(^1\) Its true identity is shown by a collection from Temiscouata, Quebec, Victorin, no. 564, in which a few of the culms bear small, apparently sterile, spikelets. In addition to its occurrence on the St. Lawrence and the Kennebec estuaries, the writer has found it on several estuaries on the northern and eastern coasts of New Brunswick and on the Sheepscot River at Alna, Maine, while Dr. Svenson has collected it on tidal mud of the Hudson River at Peekskill, New York.

Pontederia cordata L., f. **taenia**, n. f., foliis submersis sine laminis, linearibus 3–5 mm. latis translucentibus, vel emersis cum laminis 5 mm. latis petiolisque 2–3 mm. latis.—Shallow mucky cove, Damariscotta Lake, Jefferson, Maine, August 28, 1936, N. C. Fassett, no. 16067 (Type in Herbarium of the University of Wisconsin); shallow water of a stream, Readfield, July 13, 1933, N. C. Fassett, no. 15893.

The leaves of Pickerelweed are variable as to the shape of the blade, and several forms have been recognized.² But in the form here proposed, blades are usually quite lacking, or if present are scarcely differentiated from the petiole. The plants, both as to submerged and emersed leaves, superficially suggest forms of Sagittaria graminea, from which they may be distinguished by the finer and less conspicuous cellular reticulation of the phyllodia.

Podostemon Ceratophyllum Michx. Collins Dam, West Gardiner, Maine, August 18, 1936.

The water of Cobbosseecontee Stream, before widening into a pool below Collins Dam, is a foot deep over a stony bottom, and so swift that the fisherman working his line into the pool can only with difficulty maintain his footing. The bridge below the pool went out in the floods of March, 1936, and in August the water was held back during construction of a new bridge, exposing the *Podostemon*. The suggestion of Dr. Muenscher² is called to mind, that perhaps this plant is not as rare as it is generally supposed to be, for its presence would ordinarily not be suspected beneath the white water of the rapids.

Madison, Wisconsin.

¹ Rhodora xxxi. 169 (1929).

² See Fernald, Rhodora xxvii. 80 (1925).

³ Rhodora xxxiii. 166 (1931).